

**CHARTER
FOR
FEDERAL ELECTRONIC COMMERCE
ACQUISITION TEAM**

I. BACKGROUND

The President through the National Performance Review (MPR) has stressed that the need is more critical than ever to modernize the Federal Government's processes through an immediate expansion of Electronic Commerce (EC) capabilities. Pursuant to the objective of the NPR to implement meaningful acquisition reform, the Federal Government must rapidly implement EC initiatives and identify any necessary process, statutory, and regulation changes needed to support these improvements. To further these objectives, the Federal Government must accelerate the development and implementation of EC initiatives in acquisition.

II. AUTHORITY

a. On 26 October 1993, the President signed an Executive Memorandum on "Streamlining Procurement Through Electronic Commerce".¹ This Memorandum required that electronic commerce be implemented for appropriate Federal purchases as quickly as possible.

b. The Office of Federal Procurement Policy (OFPP) has directed that a Federal Electronic Commerce Acquisition Team be formed to develop a comprehensive plan for implementing an initial electronic commerce capability in accordance with the President's memorandum. Attached is a chart of the organizational relationships.

III. PURPOSE

The Federal Electronic Commerce Acquisition Team will develop a plan for a standardized electronic commerce capability for procurement throughout the Federal Government.

IV. GOALS AND OBJECTIVES

The Federal Electronic Commerce Acquisition Team will develop an architecture and implementation plan for Electronic Commerce for acquisition in the Federal Government. The architecture developed by the team will address: (1) The business

¹ *Federal Register* / Vol. 58, No. 207 / Thursday, October 28, 1993, 58095 / Presidential Documents, Memorandum of October 26, 1993, "Streamlining Procurement Through Electronic Commerce," Memorandum for the Heads of Executive Departments and Agencies [and] the President's Management Council.

processes to be supported and the functional requirements to be satisfied using electronic commerce, (2) The use of standards such as Electronic Data Interchange (EDI) standards as well as standardized procedures, and (3) The roles and responsibilities of agencies and other organizations. This plan will address these factors for the near term as well as outline a migration path over the longer term.

It is anticipated that the implementation of Electronic Commerce in the Acquisition of goods and services for the Federal Government will:

- a. Present a single face from the Government to the business community, thereby making it easier for vendors to do business with the Government.
- b. Facilitate re-engineering Governmental operation to increase productivity, reduce costs and improve Government services.
- c. Increase competition.
- d. Improve access by small and disadvantage business.

V. ROLES AND RESPONSIBILITIES

- a. The President's Management Council through the Electronic Commerce Task Force will provide overall guidance to the Electronic Commerce Acquisition Team.
- b. The OFPP has requested that the General Services Administration (GSA) and the Department of Defense (DoD) co-chair a Federal Electronic Commerce Acquisition Team. The co-chairperson(s) will be responsible for task accomplishment, management of teams activities, and reporting requirements.
- c. The National Institute of Standards and Technology (NIST) will support the Electronic Commerce Acquisition Team in the areas of standards and technology, prototype and pilot applications consistent with Federal standards, development of evaluation guidelines and technology transfer.
- d. Federal organizations will be requested to provide representatives covering interdisciplinary areas (e.g., acquisition, program, financial, technical, legal) to participate on the full time basis to the Electronic Commerce Acquisition Team for 120 days. Additional functional and technical support/coordination will be provided from each organization on an as needed basis. This will include specific support from the Agencies' acquisition Electronic Commerce projects of systems and EDI technical representatives. Specific offices and activities, as listed below, are requested to support his effort to ensure the broadest possible expertise is applied to this effort. The Electronic Commerce Acquisition Team membership will include at a minimum the following Federal Agencies:

Department of Agriculture

Department of Commerce
Department of Defense
Department of Education
Department of Energy
Department of Health and Human Services
Department of Housing and Urban Development
Department of Interior
Department of Justice
Department of Labor
Department of State
Department of Transportation
Department of Treasury
Department of Veterans Affairs
Environmental Protection Agency
General Services Administration
National Aeronautics and Space Administration
National Institute of Standards and Technology
Office of Personnel Management
Small Business Administration

e. The team will be responsible for:

(1) Preparing a mid-term and final report to be submitted to the President's Management Council's Electronic Commerce Task Force.

(2) The co-chairpersons will participate as members of the Federal Information Resource Management Council (FIRMPoC) Electronic Commerce (EC) Panel. As members, they will advise the Panel periodically on the status and progress on the Electronic Commerce Acquisition Team efforts. The FIRMPoC EC Panel will act as liaison with electronic delivery of Federal services as needed to ensure compatibility and interoperability of all Electronic Commerce Acquisition Team efforts.

(3) The co-chairpersons will work with the Federal Procurement Council as appropriate.

(4) The co-chairpersons will also brief the CFO Council on the status and progress of the EC effort and impact on any financial initiatives as required.

f. The chairperson of the FIRMPoC EC Panel will participate as a member of the team on an as needed basis.

VI. TASK OBJECTIVES

a. Provide an assessment and analysis of the current Federal Government EC/EDI capability in order to determine achievable near-term progress.

- b. Identify relevant EC/EDI policy issues related to near term and long-term Electronic Commerce implementation.
- c. Assess EC/EDI technical issues and systems architecture (current and future) to include hubs, databases, interfaces, networks/gateways, value added networks, etc., to support EC. Identify areas for standardization (e.g., EC/EDI convention, VANs certification, vendor registration).
- d. Identify candidate areas for future developments for which options should be maintained in the implementation of current and available capabilities and systems.
- e. Identify short-term and long-term Federal Government and industry benefits including contracting efficiencies, effectiveness, process improvements, and appropriate measures of those benefits. These will include identification of issues and strategies for addressing potential areas of risk and uncertainty related to near-term EC acquisition initiatives.
- f. Identify ways to ensure that the Federal Government EDI acquisition capability supports competitive acquisition and improves access for all small businesses, including small and disadvantaged businesses, and woman-owned businesses.
- g. Develop a comprehensive plan, specific time-phased recommendations, options, and action plans including estimates of resources required, to achieve implementation of EC within the Federal Government. The plan will consider the implications of other electronic commerce efforts. In addition, the plan will identify the roles and responsibilities for the executive departments or agencies responsible for developing, implementing, operating, and maintaining the Electronic Commerce acquisition system. The team should make specific recommendations to achieve the Government's rapid implementation of Electronic Commerce.
- h. Develop a plan for follow on activities after the initial 120 day effort.

VII. RESOURCES

- a. The Electronic Commerce Acquisition Team will be centrally located in a dedicated facility in the National Capital Region. Facilities will be provided with necessary furniture, equipment (computers and telecommunications), and supplies. Administrative and contractual support, as required, will also be provided.
- b. Participating Agencies will fund their participation in accordance with applicable law.
- c. Agencies will nominate prospective team members to participate on the Electronic Commerce Acquisition Team. Agencies will submit a resume highlighting their

nominees' expertise. Each senior Agency representative needs to be empowered to commit and make decision on behalf of their Agency.

VIII. SCHEDULE

12-15-93	PMC EC Task Force approves charter
12-17-93	Nominations for Electronic Commerce Acquisition Team to GSA
1-03-94	Start Electronic Commerce Acquisition Team
2-15-94	Mid Term Report to the PMC EC Task Force
3-15-94	Final architecture and agency roles and responsibilities to the PMC EC Task Force
5-03-94	Implementation plan and Final Report submitted to PMC EC Task Force

Signatures of Approval for the Charter for Federal Electronic Commerce Acquisition Team:

_____(signed)*_____
Joe M. Thompson
Commissioner,
General Services Administration
Information Resources Management

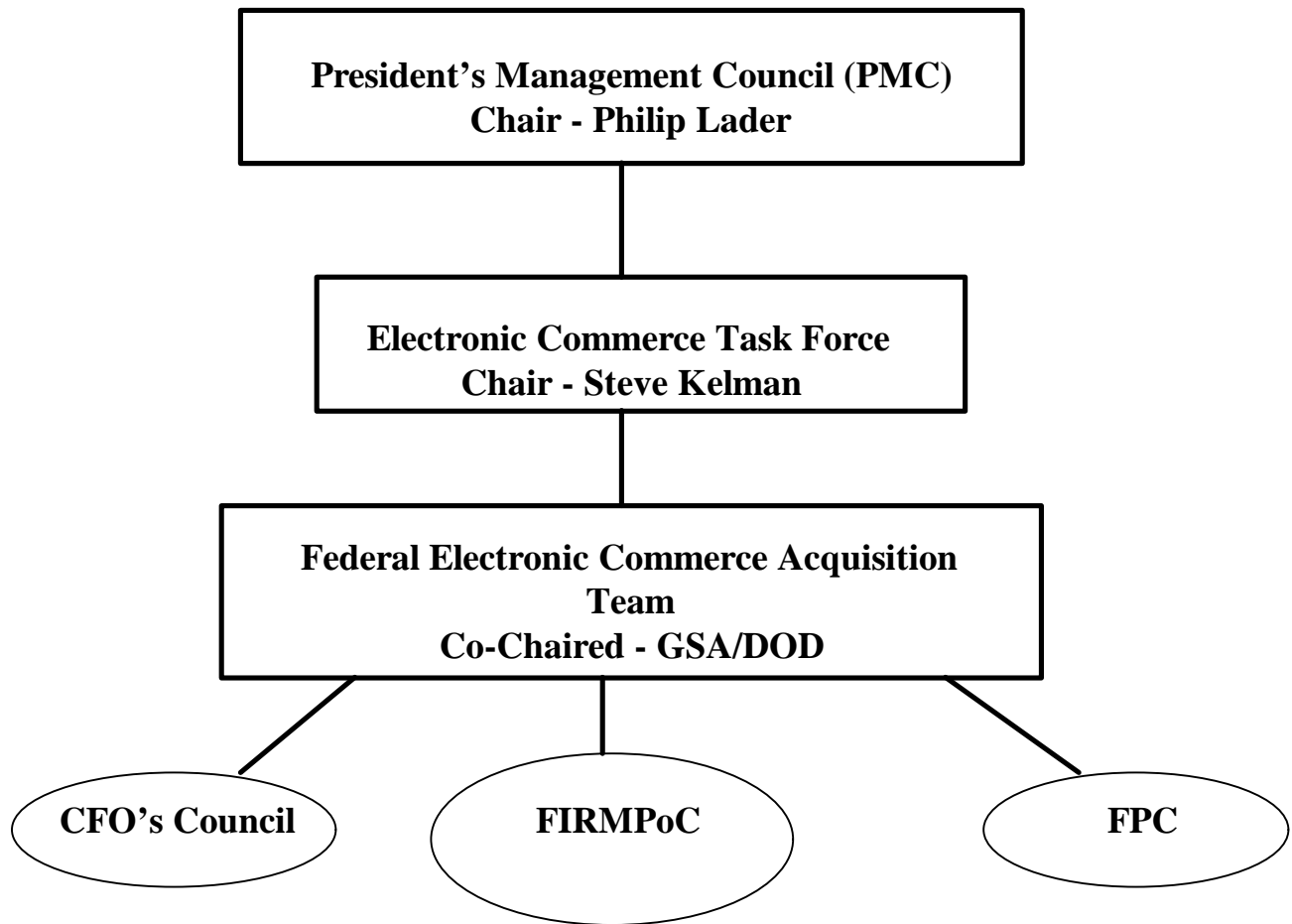
_____(signed)*_____
Honorable Emmett Paige, Jr.
Assistant Secretary of Defense
for C3I

_____(signed)*_____
Steven Kelman
Administrator, Office of Federal
Procurement Policy

_____(signed)*_____
Colleen A. Preston
Deputy Under Secretary of Defense
(Acquisition Reform)
& DoD Task Force Representative
for Streamlining Procurement
through Electronic Commerce

*PLEASE NOTE: A signed copy of the Charter is on file with GSA with copies at the Federal Electronic Commerce Team.

Federal Electronic Commerce Acquisition Organization Structure



Attachment 1

Glossary

acceptance test	Test performed by the user that checks a device for its proper function as specified by the manufacturer.
access code	Special coded password or identification name or number used to obtain access to a computer system, network or BBS. Each user has a unique code; the code identifies them with the system to which they are attempting to gain access. Users can thus be monitored by the personal accounts set up for them on a system. If misuse of a system is detected, this code will identify the person responsible so necessary action can be taken to remedy the situation.
access path	Path that the system follows when seeking a particular file. The access path must define the location of the file from the root of the drive through the proper directories leading to the actual file. An access path must be defined in the autoexec.bat file to point to the most-used directories; this allows the user to be able to access and run a program from any location on a disk.
access time	Amount of time required from the instant the computer asks for data until the data are transferred to the computer for processing.
account	Arrangement by an on-line service through which the user establishes an understanding and agreement with the service to have access to the service and be billed by the service for the use. Some systems have user accounts without billing process just to keep a record of the users and their activities on the system. A user account is a privilege that allows the person to have access to another computer for his or her benefit, such as communicating with other users or accessing files for download, or for entertainment, such as playing on-line games.
accuracy	Degree of correct information in data recording. Refers to the degree of correctness of a result.
ACK	Short for acknowledgment, which is used widely in communication programs to send acknowledgment of system readiness or the error-free reception of data.
algorithm	Special set of simple mathematical and logical procedures used to solve a problem in a finite number of steps.
American National Standards Institute	Organization devoted to development of voluntary standards to enhance productivity and international competition of American industrial enterprises
American Standard Code for Information Interchange	Standard set of characters devised in 1968 to enable efficient data exchange and compatibility among different computer devices and peripherals.
ANSI standard	Document published by ANSI that has been approved through the consensus process of public announcement and review. Each of these standards must have been developed by an ANSI committee and must be revisited by that committee within 5 years for update.

application acknowledgment	Transaction set whose purpose is to return a response to a transaction set that has been received and processed in an application program. The Purchase Order Acknowledgment transaction set 855 is an example of an application acknowledgment. It is used to respond to the Purchase Order transaction set 850, which queries whether the receiver can fulfill the order and if it can be done on time.
application advice (824)	Transaction set that accepts, rejects, or identifies errors in the content of any transaction set beyond the normal syntax checks.
archival storage	Storage of data that are seldom used but need to be kept for a long time, such as backups of the system drives. The most popular means of archival storage are floppy disks and magnetic tape drives.
archive	Means to file information that needs to be kept for a long time. An archive file can be a compressed file containing several other files that can be uncompressed for use at a later date. This compression of archived files allows more information to be stored on a given disk.
archive attribute	Hidden code in DOS and OS/2 stored along with the file's directory entry, indicating whether the file has been changed since the last backup of the file. This attribute code may be used when backing up just the files that have been changed since the previous backup.
area transaction set	Identifies a predefined area within a transaction set (header, detail, summary) containing segments and their various attributes.
ASC X12	Accredited Standards Committee X12 comprises industry members who create EDI standards for submission to ANSI for subsequent approval and dissemination or for submission to the United Nations Standards Committee for approval of international EDIFACT standards.
ASCII character set	Set of characters composed of only those characters included in the original 128-character ASCII standard.
ASCII file	File containing only characters from the ASCII character set.
assembly language	Programming language in which each line of code corresponds directly with a single system instruction or command. This type of programming gives the programmer precise control over the computer system.
asynchronous device	Device that is not synchronized in internal operations with any other part of the computer system.
authentication	Mechanism that allows the receiver of an electronic transmission to verify the sender and the integrity of the content of the transmission through the use of an electronic key or algorithm which is shared by the trading partners. This is sometimes referred to as an electronic signature.
automated clearing house	Nationwide electronic payments network for both debit and credit items. ACH is an EFT mechanism using the Federal Reserve Network. Funds are transferred/settled next day.
back up	Process of copying master disks that come with software when bought in order to preserve the originals from possible destruction and to make a usable copy of the master.
back up and restore	Procedure in which files are backed up to another storage device and are available to be restored for use if the need arises.

bandwidth	Measurement in cycles per second (hertz) or in bits per second (bps) of the quantity of information that is able to flow through a channel.
batch file	File that contains a group of DOS that are to be executed in sequence as if typed from the keyboard. These files are useful for easing the use of repetitious command entries. The most familiar of batch files is the autoexec.bat, which DOS loads at the start of every operating session.
batch job	Program or set of commands that can be run without any kind of user intervention.
baud	Measurement of the number of times per second that switching occurs in a communication channel.
baud rate	Speed of transmission of an asynchronous communication channel. Rate of transfer between two modems.
benchmark	Measurement standard used when testing the performance of different brand names of equipment to rate them.
benchmark program	Program utility used to measure the processing speed of a computer so that it can be compared to that of another computer running the same program.
BIOS	Built-in set of routines and commands that work with the system hardware to support the transfer of data between the different devices of a system, such as disk drives, memory, and monitor. The BIOS is located on a ROM chip inside the system and is mostly invisible to the general computer user, though it can be accessed by programmers.
browse	Process of viewing the contents of a file without doing anything to the data. This allows searching for particular information quickly.
bulk storage	Storage device, such as tape drive, that has the ability to store unusually large amounts of data.
Bulletin Board System	Computer accessible by other computers for the exchange of information and files. Most are set up by individuals in their homes and allow access to the general computer public.
byte	Size of memory space needed to store a single character, which is usually 8 bits. The computer's memory size is measured in kilobytes; 1 kilobyte = 1,024 bytes.
C	Very powerful and efficient programming language comparable to assembly language. C language was used to write the code for most of the UNIX operating system.
cache	Special designated part of memory used to store information that is read from the disk drive so that the information can be retrieved quickly from cache memory the next time it is needed instead of from the slower disk drive. The drive is read once and the information is stored in the cache. When the same information is asked for again by the system, it searches the cache memory first, therefore speeding up the search process.
capture	Process of transferring received data into a file for archiving and later use. Also refers to the process of copying information contained on the monitor to a file on the disk for later use.

case-sensitive	Ability to distinguish between upper- and lowercase letters; very useful for exact text searches in word processing. DOS is not case-sensitive since a search will work regardless of the upper and lower case letters used.
catalog	Complete listing of contents on a disk or of all files contained on all disks, enabling a particular file to be located more rapidly.
CCD+	NACHA format that is used for one payment with one addendum record (invoice).
checksum	Method of verification used by the computer to ensure that transmitted data are free of errors. The computer sending the information sends a checksum on the unit of data sent; the receiving computer verifies the checksum against the data received to see if it arrives at the same figure. If so, the data have transmitted properly.
client	The computer in a computer link accessing the server, which is the main computer supplying a service to other computers.
clock	Computer clock consisting of a circuit that generates series of equally spaced pulse signals. The machine's functions are carried out by the rate of the clock pulses. Also refers to the real-time clock, a special circuit that tracks the date and time and can be battery-backed to keep the date and time current even when the electric power to the computer is turned off.
coding	Process of writing the actual instructions in program code that tells the machine what to do.
Commercial and Government Entity code	Five-position company identification code issued by the Defense Logistics Agency for use in DoD's supply management program.
communications program	Computer program that enables two computers to communicate through the phone line to transmit and receive data
Company Identification Code	Code consisting of numbers, letters, or combination that uniquely identifies a trading partner who does business with the Federal government.
compatible	Capable of running the same programs. Hardware compatibility refers to the ability of various components of hardware to work together as one unit.
compliance checking	Process used to ensure that a transmission complies with ANSI X12 syntax rules.
compressed file	File that has been run through a file compression program, which makes the file smaller by changing the formatting without altering the integrity of the file contents. File compression is widely used on a BBS so that large files can be stored in as small a space as possible.
CompuServe	Computer-operated consumer information service located in Columbus, Ohio. Users can access information from this service by communicating through a modem from anywhere in the United States. CompuServe allows users to exchange electronic mail as well as to access numerous file and information areas.
computer security	Protection of highly valued information such as payroll records or company finance statements. There may be several levels of security related to different levels of information access. The most common form of computer security requires users to employ passwords to access particular areas; the password only allows access to a certain level of information.

computer-aided design	Graphics-oriented design program used by architects and engineers to draw plans for projects or design new machinery. CAD enables the design to be manipulated much more easily on the screen than could be done on paper by hand.
condition	Term referring to a result being either true or false, or equal or not equal.
conditional	Process or action that takes place based on the determination of whether or not a condition is true.
configuration	Makeup of a computer system, including all internal and external components such as memory, disk drives, keyboard, video, and add-on hardware such as a mouse or printer. Some configurations are monitor type, amount of memory, type of memory to use, and which disk drive to use. Also refers to a specific setup of software program to make the best and most efficient use of the system resources.
configure	Process of setting up the computer to make the different devices function as one unit or of setting up or fine tuning software to run more efficiently on a particular machine.
Contractor Establishment Code	Nine-position company identification code issued through the General Services Administration to identify vendors in the Federal Procurement Data System.
control segment	Means to transfer control information for grouping data segments.
control validation	Confirmation that information within the control segments is correct.
Corporated Trading Exchange	NACHA format that is used for one payment with multiple addenda records. CTX is the marriage of ACH and ASC X12. A significant amount of remittance information can accompany value transfer.
data	Items of information that have been gathered to be used in some type of process.
data acquisition	Process of gathering data from an outside source that is not part of the immediate system.
data attribute	Structure information that establishes the context of the data and gives it meaning. Also used to refer to the descriptive structure information of a field in a data record.
data bank	Any collection of data.
data base	Collection of related records containing information to be used for processing. The records are broken down into individual fields that allow for various means of manipulating the data to produce specific, individualized reports. Data bases are used widely for record keeping and data tracking.
data base administrator	Individual or groups of individuals responsible for the data base. They mainly determine the information content of a data base, internal storage structuring and access strategy, and a means of checking security and integrity and of monitoring data base performance and upgrading to stay with the requirements of the environment.
data base designer	Individual responsible for designing and implementing functions required in a data base management system. The person lays out a data base structure similar in setup and writing code to that used by a programmer for a new program.

data capture	Collection of information that usually occurs during the time of the transaction that creates the data, such as the automatic tracking of withdrawals from a cash machine.
data collecting	Process of assembling data from a source and manipulating that data into an organizational structure.
data compression	Process by which the contents of a data file are changed to enable the information to take up less disk space. This procedure eliminates repeating items in the data and has a code to show different lengths for certain character sequences. Data compression can make a regular text file about half its original size.
data control	Process of managing data through the tracking of how and by whom the data is being used, accessed, owned, altered, or reported on.
data element	Basic units of information in the EDI standards containing a set of values that represents a singular fact. They may be single-character codes, literal descriptions, numeric values, or it may have a specific size, type, and range.
data element length	Range, minimum to maximum, of the number of character positions available to represent the value of a data element. A data element may be of variable length with range from minimum to maximum, or it may be of fixed length in which the minimum is equal to the maximum.
data element reference number	Reference number assigned to each data element as a unique identifier.
data element requirement designator	Code defining the need for a data element value to appear in the segment if the segment is transmitted. The codes are mandatory (M), operational (O), or conditional (C).
data element type	Data element may be one of six types: numeric, decimal, identifier, string, date, or time.
data entry	Process of entering new data into the system, mainly by way of a keyboard.
data field	Designated area for a specific piece of information to be stored in a data record. It can be a space allocated for a name, address, and so on.
data flow	Process by which data move through a computer system from an entry point to a destination point. It can be as simple as reading records and printing the records as they are read, or it can be complex to include performing mathematical calculations on portions of the data and setting them up in a report format before the final product is printed.
data integrity	Accuracy of file data. Data integrity ensures that the data are pure and not corrupted.
data link	Actual connection through which data can be transferred from one computer device to another. This type of link is used to connect any two or more devices that have the capability to send or receive data.
data management	Orderly and accurate control of data from the time it is acquired until the time it reaches its final point of use.
data server	Station of a computer network that is designated as the system dedicated

	to storing a shared data base and processing data base requests sent by users on the other systems in the network.
data sharing	Use of the same file by more than one person at a time by more than one computer system at a time. This can be done by copying the file for use by all persons or systems needing it, or it can be done by accessing the file from a main server and using the file directly from that source.
data transfer	Process of moving data from one physical location to another either through internal means in a computer by transferring data from memory to disk, disk to tape, or hard disk to floppy, or through external means by transferring data between computers on a network or through a communications link.
Data Universal Numbering System [®]	Nine-position company identification code issued by the Dun and Bradstreet Corporation to identify businesses in its automated files.
decryption	Decoding of encrypted or specially coded information to allow use of the data in a normal manner. This is a form of guarding information to help ensure limited access.
dedicated	Term referring to the use of an item for one main function. If a phone line is used for the computer and nothing else, it is considered a dedicated phone line.
dedicated channel	Communications line totally reserved for a particular use; also referred to as dedicated line.
delimiters	The delimiters are an integral part of the transferred data stream. Delimiters are specified in the interchange header and may not be used in a data element value elsewhere in the interchange. From highest to lowest level, the terminator and separators are segment separator (used only in EDIFACT).
dial-up service	Service relying on telephones to place station-to-station calls throughout a switched network.
digital communications	Transmission of binary-coded data through a communications channel.
direct access storage device	Device enabling direct access to data instead of having to start at the beginning of a data source to read every record until the one needed is found. A disk drive is a DASD unit, whereas a tape drive is not.
direct transmission	Exchange of data from the computer of the sending party directly to the computer of the receiving party. A third-party, value-added service is not used in a direct transmission code.
disk access time	Time between the system request for information from a device until the information is supplied or read.
documentation	Text file or book that comes with software describing the computer program. It tells the uses of the program as well as how to operate it. Reading the documentation is important for developing knowledge to use the software to its fullest advantage.
download	Process of transmitting a program from a host or main computer to another computer at a remote site.

Draft Standard for Trial Use	Proposed EDI transaction set standard that remains in draft form until approved.
dynamic data exchange	Function incorporated in Windows that allows programs to exchange data among themselves while they are running. This enables the user to update a spreadsheet by merely updating a data base linked to the spreadsheet.
EDI translation	Conversion of application data to and from the X12 standard format.
EDI translator	Computer software used to convert application data to and from the X12 standard.
Electronic Bulletin Board	Bulletin board system that can be accessed with a modem for the purpose of exchanging information and acquiring files by downloading. For example, an agency can upload an RFQ to be released to vendors who will be able to download at a specific time in order to respond to the RFQ.
electronic commerce	End-to-end, paperless business environment that integrates electronic transfer and automated business systems.
electronic data interchange	Exchange of information without human intervention.
electronic funds transfer	Transfer of funds electronically through the Treasury Fedline Payment System or the automated clearinghouse network.
electronic mailbox	The place where an EDI transmission is stored for pickup or delivery within a third-party service provider's system. Trading partners can also maintain mailboxes within their own domains.
E-mail	Method of exchanging mail messages by way of a computer system. The messages are stored on a mutually shared system and users can send and receive messages at their own convenience.
employer identification number	Nine-position number issued by the Internal Revenue Service for tax purposes to identify corporations, partnerships, nonprofit associations, and trusts.
enable	Process of making something available for use by the system when it is needed.
encryption	Special coding process to make files inaccessible to unauthorized users. This process transforms clear text (data in its original form) into ciphertext (encryption output of a cryptographic algorithm) for security or privacy. A password or private key is needed to decrypt the file for use. Security transaction set 815.
end user	Person who will be using a program after it is placed in the open market.
environment	Use of a particular computer. Operating systems, word processing, and data bases are all different environments. The DOS environment is a specific area of memory where data can be stored by the DOS SET command.
error checking	Process of testing transmitted data with received data to ensure the integrity of the data.
export	Transfer of information from one program to another or from one system to another. The two programs that are dealing with the transferred file must be able to recognize the format of the data being transferred. Several

programs are compatible in the exchange of data, while others are totally proprietary.

fax	Facsimile machine, which is used to transmit a copy of a paper document or graphic file over the telephone lines by converting the document on paper into an electronic signal. This signal is intercepted at the other end by another fax machine, which converts it back to its original form and prints it back to paper.
Federal Supply Class	Code developed by the Defense Logistics Agency for use in DoD's supply management program.
field	Individual pieces of information that make up a record. A name can be one field, while the address is another field. The designation of individual fields allows more useful manipulation of data.
field name	User-designated name for a specific piece of data in a record to identify that data, such as name, address, or city. Field names are more useful if they coincide with the information to which they pertain.
field separator	Character used to separate one data field from another.
file conversion utility	Program that can convert file formats from one type to another so the file can be used with other programs. A well-written word processor has this capacity so they can read files created by different word processing systems. Many programs call this feature importing and exporting files and allow the user to designate which file formats are being used.
file transfer	Ability to move files from one place to another or to transmit them from one computer to another.
file transfer protocol	Program that enables files to be transferred from another computer. Both systems must have the same protocol software available to transfer properly. There are many good protocols available and most are incorporated into the communication programs. The most popular protocol used on a BBS is Z modem because of its error correction and speed.
full text search	Ability to search through every word in multiple or single documents to find a particular designated word or phrase, enabling the user to access only those documents containing information pertaining to the point of interest and to ignore all others.
Functional Acknowledgment	Transaction set 997, which is transmitted by the receiver of an EDI transmission to the sender, indicating receipt and syntactical acceptability.
gateway	Link between several computers in a network setup.
graphical user interface	Interface that presents the user with graphic symbols or pictures that can be activated by clicking with a mouse to perform certain functions. Operating a computer by manipulating picture icons and windows with the use of a mouse.
graphics interchange format	Format developed by CompuServe to be used for saving bitmap images on a disk. This is a very popular format with BBSs because it reduces files to reasonable sizes for storage and easy downloading by users.
handshaking	Process of connecting two computers successfully to send and receive data properly.
imaging	Process of capturing, storing, displaying, and printing graphical images. Capturing can be done with a scanner or a capture program. Storing can be done on the hard drive or on floppy disks. Displaying the files usually

	requires the presence of a graphics presentation program or viewer. Printing can be done using various programs.
import	Process of loading a file created with one program into a totally different program retaining its integrity and formatting.
integrity	Accuracy and pure contents of data stored on a computer system, particularly after it has been modified.
interactive	Back-and-forth response of operations, such as when a user enters a question to the computer and the computer responds immediately.
interface	Electronic circuit that monitors the connection between two pieces of hardware to ensure they exchange data properly.
lag	Time difference between two events. Also refers to the time difference between a change of input and a change of output.
local area network	Grouping of computers connected to a main unit called the server.
log-in security	Procedure used network systems and BBSs to gain access to the system by typing in a previously defined password or code word pertaining to a particular account.
log on	Process of connecting to another computer and successfully gaining access by entering the proper identification.
look-up table	Special area set up with data that the program may access to determine the necessary information to use in a given task. This is a storage area for information to be selected by the program according to a set procedure.
machine readable	Input in a format that the computer can read, such as bar codes that are scanned directly into the system to be used in an application. Also refers to the binary information stored onto magnetic media that the computer can access and read into the memory.
mailbox	Area designated on a network system into which electronic mail messages are stored on disk. Each user has his or her own private mailbox area.
mail-merge	Ability, in a mass-mail environment, to integrate names, addresses, and other pertinent information into form letters or other special types of documents.
management information system	Computer-based system for processing and organizing data to provide different levels of management, including accurate and timely reports for supervision of activities, tracking progress, making decisions, and solving problems.
mandatory (M)	Data element requirement designator used to indicate that the data element must be present.
matching	Process of testing whether two sets of data are identical. Also used to describe the process of finding a data item that matches an entered key word or code.
matrix	Arrangement of rows and columns used in organizing related items such as numbers, dots, spreadsheet cells, or circuit elements. In computer applications, matrixes are used to arrange sets of data into a table format. In hardware use, matrixes of dots are used to create characters on the screen and to form characters for printing, such as on a dot-matrix printer.

mean time between failures	Average amount of time, usually described in thousands or tens of thousands of hours, that elapses before a hardware component fails to the point of requiring service.
media	Physical material, such as paper, disks, and tapes, used to store computer-related information.
merge	Process of combining two or more items in an orderly fashion without changing the basic structure of either item.
message	Unit of information in a communications environment that is transmitted electronically from one device to another. There are several connotations of the term. (1) In electronic mail, a message is a note from another user, organized similar to a memorandum (TO, FROM, SUBJECT, DATE) and received in an electronic mailbox. (2) To a computer or a communications network, a message is a transmission unit that transmits according to certain rules (protocols) that are followed by both the sending and receiving devices. A message can contain one or more blocks of text as well as beginning and ending characters, control characters, a software-generated header (destination address, type of message, and other such information), and error-checking or synchronizing information. (3) In software, a message is a piece of information passed from the application or the operating system to the user to suggest an action that must be taken, to indicate a condition, or to inform that an event has occurred.
message header	Sequence of bits or bytes at the beginning of a message that usually provides a timing sequence and specifies such aspects pertaining to the message structure as its length, data format, and block identification number.
message switching	Technique used on some communications networks in which a message, with appropriate address information, is routed through one or more switching stations before being sent to its destination. On a typical message-switching network, a central computer receives messages, stores them (usually briefly), determines their destination addresses, and then delivers them to the appropriate party. Message switching enables a network to regulate traffic and to use communications lines efficiently.
modem	Shortened form of modulator/demodulator, a communications device that enables a computer to convert data and send and receive it through regular phone lines. Modems can transfer data at rates of 300 baud to 19,200 baud on leased phone lines. Modems contain such built-in features as automatic phone dialing, auto answering, and redialing capabilities.
modular design	Approach in designing hardware or software in which a project is broken into smaller units, or modules, each of which can be developed, tested, and finished independently before being combined with the others to form the final product. Each unit is designed to perform a particular task or function and can then become part of a "library" of modules that can often be reused in other products having similar requirements. In programming, for example, one module might contain instructions for moving the cursor in a window on the screen. Because it is designed as a stand-alone unit that can work with other sections of a program, the same module might be able

to perform the same task in another program as well, saving time in the developing and testing phase. The designer must build into each module the necessary means of working with other parts of the product. product.

national stock number	Code developed by the Defense Logistics Agency for use in DoD's supply management program.
network	Group of computers and associated devices connected by means of communications facilities. A network can involve permanent connections, such as cables, or temporary connections made through telephone or other communications links. A network can be as small as a local area network consisting of a few computers or many small and large computers distributed over a vast geographic area to provide computer users with the means of transferring information electronically. Some types of communication are simple user-to-user messages; others, of the type known as distributed processes, can involve several computers and sharing of workloads or cooperative efforts in performing a task.
network administrator	Person in charge of operations either on a wide area network system or a local area network system. Duties might include such tasks as installing new workstations and other devices, adding and removing authorized users, archiving files, overseeing password protection and other security measures, monitoring usage of shared resources, and handling malfunctioning equipment. Also referred to as a system administrator.
network architecture	Underlying structure of a computer network, including hardware, functional layers, interfaces, and protocols (rules) used to establish communications and to ensure the reliable transfer of information. Since a computer network is a mixture of hardware and software, network architectures are designed to provide both philosophical and physical standards for enabling computers and other devices to handle the complexities of establishing communications links and transferring information without conflict. There are numerous network architectures in existence, among them the internationally accepted seven-layer open systems interconnectivity (OSI) model of the International Organization for Standardization (IOS) and IBM's System Network Architecture (SNA). Both the OSI and SNA architectures organize network functions in layers, with each layer dedicated to a particular aspect of communication or transmission and with the use of protocols that define how functions are carried out. The objective of these network architecture is to create communication standards that will enable computers of various kinds to exchange information freely and (to the user) transparently.
network data base	Type of data base in which data records can be linked (related to one another) in more than one way. A network data base is similar to a hierarchical data base in that it contains a progression from one record to another. It differs in being less rigidly structured, since any single record can point to more than one other record and, conversely, can be pointed to by one or more records. A network data base allows more than one path between any two records, whereas a hierarchical data base allows only one, from parent (higher-level record) to child (lower-level record).
node	Junction of some type. On local area networks, this is a device connected to the network and able to communicate with other network devices. In tree structures, a location (set of information) on the tree can have links to one or more nodes below it (child nodes). Some authors make a distinction between node and element, with an element being a given data type and a node comprising one or more elements as well as any supporting data structures (such as pointers).

office automation	Use of electronic and communications devices such as computers, modems, and fax machines as well as any associated software to perform office functions mechanically rather than manually.
off-the-shelf	Item that is ready to use right from the package. The term can refer to hardware or software.
on-line help	Special feature of most high-end applications that offers the user detailed help on program operations while working in the application. Most applications use a keystroke to bring up the on-line help. The F1 key is becoming a standard to represent help access.
open architecture	Computer or peripheral design that has published specifications, enabling third parties to develop add-on hardware for an open architecture computer or device. Also refers to a design that provides for expansion slots on the motherboard, allowing the addition of boards to enhance or customize a system.
operating system	Software responsible for controlling the allocation and usage of hardware resources such as memory, central processing unit time, disk space, and peripheral devices. The operating system is the foundation on which applications such as word processing and spreadsheet programs are built. Popular operating systems include MS-DOS, the Macintosh OS< OS/2, and UNIX.
optional (O)	Data element requirement designator indicating that the item is not mandatory.
paperless office	Office environment in which information is entirely stored, manipulated, and transferred electronically rather than on paper.
password	Security measure used to restrict access to computer systems and sensitive files. A password is a unique string of characters that a user types in as an identification code. The system compares the code against a stored list of authorized passwords and users; if the code is legitimate, the system allows the user access at whatever security level has been approved for the owner of that password.
password protection	Use of passwords as a means of allowing only authorized users access to a computer system or its files.
populate	Process of filling the fields in a data base, directory service, or the sockets of a circuit board.
priority	Precedence in receiving the attention of the microprocessor and the use of system resources. Within a computer, unseen and unnoticed levels of priority are the means by which many different types of potential clashes and disruptions are avoided. Devices such as the timer, keyboard, modem, disk drives, and mouse have different interrupt priorities, both so that their individual requests for service do not conflict and so that none can interrupt the microprocessor at critical moments. Similarly, tasks running on a computer can be assigned priorities that determine when and for how long they receive time from the microprocessor. On networks, stations can be assigned priorities that determine when and how often then can control the communications line, and messages can be assigned priorities that indicate how soon they must be transmitted.
Procurement Automated Source System	System developed by the Small Business Administration that serves as a data base of information on small businesses.

query	Process of extracting data from a data base and presenting it for use. Also, a specific set of instructions for extracting particular data repetitively. In this latter context, for example, a query might be created to present sales figures for a particular region of the country. This query could be run periodically to obtain current reports.
query by example	Simple-to-use query language implemented on several relational data base management systems. Using QBE, the user specifies fields to be displayed, intertable linkages, and retrieval criteria directly onto forms displayed on the screen. These forms are a direct pictorial representation of the table and row structures that make up the data base. Thus, the construction of a query becomes a simple "checkoff" procedure from the viewpoint of the user.
raw data	Unprocessed and usually unformatted data; a stream of bits that has not been filtered for commands or special characters. More generally, information that has been collected but not evaluated.
read	Process of gathering information from an input source to be used by the computer. Reading is the means by which a computer receives information, typically from a disk drive; the opposite is writing — the process of transferring information to storage such as a disk or to a device such as a printer or the screen. A disk read means that information is transferred from disk into memory. A computer can also be said to read the keyboard when it accepts keystrokes from the user.
relational data base	Type of data base or data base management system that stores information in tables (rows and columns of data) and conducts searches by using data in specified columns of one table to find additional data in another table. In a relational data base, the rows of a table represent records (collection of information about separate items) and the columns represent fields (particular attributes of a record). In conducting searches, a relational data base matches information from a field in one table with information in a corresponding field of another table to produce a third table that combines requested data from both tables.
release	Particular version of a piece of software, most commonly associated with the most recent version (as in "the latest release"). Some companies, for example, Lotus Development Corporation, use the term as an integral part of the product name (as in Lotus 1-2-3 release 2.2). Release also refers to the process of an application relinquishing control of a block of memory, a device, or other system resource, thereby "releasing" it to the operating system.
response time	Time, usually an average, that elapses between the issuance of a request and the provision of the data requested. Also refers to the time required for a memory circuit or a storage device to furnish data requested by the central processing unit.
retrieve	Process of obtaining requested data. Computers can retrieve information from any source of storage, such as disks, tapes, or memory. In general, retrieve refers to locating a specific item or set of data, as from a data base, and returning it to a program or to the user.
seamless integration	Smooth blending of new hardware, a new program, or a program addition into the overall working of a system. Seamless integration is the result of careful design.

search	Process of seeking the location of a file or searching a file or data structure for specific data. A search is carried out by comparison or calculation to determine whether a match to some specified pattern exists or whether some other criteria have been met; for example, a search might or might not be sensitive to uppercase and lowercase letters, depending on the program.
search and replace	Process typical of application programs such as word processors in which the user can specify two strings of characters, one string for the program to find and replace with the second string. For example, a program might be instructed to find the word "company" and replace it with the "corporation." Search-and-replace procedures might or might not be sensitive to uppercase and lowercase, depending on the program.
search string	String of characters to be matched in a search, typically (but not necessarily) a text string.
security	Protection of a computer system and its data from harm or loss. A major focus of computer security, especially on systems accessed by many people or through communications lines, is the system screening, which denies access to unauthorized users and protects data from unauthorized uses.
session	Time during which a program is running. With the interactive programs typical of microcomputers, a session represents the time during which the program accepts input, processes information, and responds to user commands. In communications, session refers to the time during which two computers (or a computer and a terminal) maintain a connection and, usually, are engaged in transferring information. In this context, session also refers to a specific protocol layer in the ISO/OSI networking model that manages communication between remote users or processes.
SF-129	Solicitation Mailing List Application, a standard form used by the Federal government to collect information on vendors. Information is collected by individual procurement offices.
signature	Sequence of data used for identification, such as an identifier appended to a message in an electronic mail message or in a fax.
social security number	Nine-position number issued by the Social Security Administration and used by the Internal Revenue Service to identify individual persons and estates of decedents.
standard	Set of detailed technical guidelines used as a means of establishing uniformity in an area of hardware or software development. Computer standards have traditionally developed in either of two ways. The first, a highly informal process, occurs when a product or philosophy is developed by a single company and, through success and imitation, becomes so widely used that deviation from the norm causes compatibility problems or limits marketability. This type of de facto standard setting is typified by such products as Hayes modems and IBM PCs. The second type of standard setting is a far more formal process in which specifications are drafted by a cooperative group or committee after an intensive study of existing methods, approaches, and technological trends and developments. The proposed standards are later ratified or approved by a recognized organization and are adopted over time by consensus as products based on the standards become increasingly prevalent in the market. Standards of this more formal type are numerous, including the ASCII character set,

	the RS-232-C, the SCSI interface, and ANSI standard programming languages, such as C and FORTRAN.
standard industrial classification	Coding system to identify specific industrial goods.
syntax	Grammar or rules that define the structure of the EDI standards.
taxpayer identifying number	Number used by the Internal Revenue Service to identify taxpaying entities. The TIN may be an employer identification number (EIN) or social security number (SSN).
terminal emulation	Technique of imitating of imitating a terminal by using software that conforms to a standard such as the ANSI standard for terminal emulation. Terminal-emulation software can be used to make a microcomputer act as if it were a particular type of terminal while it is communicating with another computer, such as a mainframe.
throughput	Measure of the data transfer rate through a complex communications system or of the data processing rate in a computer system.
trading partner	Party involved in the exchange of EDI transmissions.
trading partner agreement	Agreement between the government and a trading partner that defines general EDI procedures, terms and conditions, and the EDI transaction sets that will be used.
trading partner identification number	Confidential identification number assigned by computer by the central registration site to the trading partner.
transaction set	Definition, in the standard syntax, of information of business or strategic significance. Consists of a transaction set header segment, one or more data segments in a specified order, and a transaction set trailer segment.
transaction set ID	First data element of the transaction set header segment. Uniquely identifies the transaction set.
translation	Act of accepting documents in other than standard format and subsequently translating them into the standard format.
update	Process of changing a system or data file to make it more current. Also refers to a new release of an existing software product. A software update usually adds relatively minor new features to a product or corrects errors (bugs) found after the program was released. Updates are generally indicated by small changes in software version numbers, as in incrementing version 4.01 to 4.02. Compare "release."
upload	Process of transferring a copy of a file from a local computer to a remote computer by means of a modem or network. With a modem-based communications link, the process generally involves instructing the remote computer to prepare to receive the file on its disk and then wait for the transmission to begin.
validation suite	Set of tests designed to measure compliance to a standard, especially a standard definition of a programming language. For example, for a compiler to be an Ada compiler, it must successfully and correctly compile and run all the source-code programs in the Ada validation suite created by the DoD.
validity checking	Process of analyzing data to determine whether it conforms to certain predefined parameters of completeness and consistency. For example, a

	utility program could do a validity check on a data base to ensure that each record has been encoded in a way compatible with the data base.
value-added network	Communications network that transmits, receives, and stores EDI messages for EDI trading partners.
value-added reseller	Company that acquires hardware and software in complete form and resells it to the public, adding value through user support, service, and so on.
vendor express payments	Direct deposit for businesses (vendors) that provide goods and/or services to any Federal agency. These payments are made directly through the automated clearinghouse network for deposit directly into the designated bank account on the payment due date.
virtual	Device or service perceived to be what it is not in actuality. The way in which a virtual device is actually presented or implemented is much different from the device or service the user experiences. For example, a computer user can treat a virtual disk as if it were a physical disk, but a virtual disk is actually a portion of the computer's memory that is used as if it were a disk. Another example is virtual memory, which is simulated by paging, caching, and disk storage.
virtual address	In reference to a virtual memory system, the address the application uses to reference memory. The memory management unit translates this address into a physical address before the memory is actually read or written.
virtual circuit	Communications link that appears to be a direct connection between sender and receiver, although physically (as on a packet-switching network) the link can involve routing through more circuitous paths. A virtual circuit is conceptual rather than physical. The virtual circuit connects caller A with receiver B, but the physical circuit through which they actually communicate can run from A through stations D, E, and F before reaching B.
virtual device	Device that can be referenced but that does not physically exist. A virtual memory-addressing scheme, for example, uses magnetic disk storage to simulate memory larger than that physically available.
virtual network	Like the virtual circuit, network that provides for a linking of all available government and industry networks to provide virtual connectivity from any person in the government to connect to industry to do business electronically.
wide area network	Communications network that connects geographically separated areas.

Acronyms

A&E	architecture and engineering
ABC	American Business Computer
ACHS	automated clearinghouse system
ADMD	Administrative Data Management Domain
ADP	automated data processing
AIS	automated information system
ALE	annual loss expectancy
AMIS	Acquisition Management Information System
ANSI	American National Standards Institute
API	Application Programming Interface
APP	Application Portability Profile
APPL	agency application
ASC	Accredited Standards Committee
ASCII	American Standard Code for Information Interchange
AT&T	American Telephone & Telegraph
BBS	Bulletin Board System
CAGE	Commercial and Government Entity
CALS	Continuous Acquisition and Life-Cycle Support
CASE	computer-aided software engineering
CBD	Commerce Business Daily
CCD	Cash Concentration or Disbursement
CCD+	Cash Concentration or Disbursement with one 80 position addendum record
CCITT	Consultative Committee on International Telegraphy and Telephony
CEC	Contractor Establishment Code
CFS	Center for Standards
CIM	corporate information management
CLNP	connectionless network protocol
CM	configuration management
CONUS	Continental United States (except Alaska)
COOP	continuity of operations
COTS	commercial off-the-shelf
CR	Contractor Registration Module
CTP	Corporate Trade Payment
CTX	Corporate Trade Exchange
CSL	Computer Systems Laboratory
CVTS	Compressed Video Transmission Service
DBMS	data base management system
DCE	Distributed Computing Environment

DDN	Defense Data Network
DFAS	Defense Finance and Accounting Service
DISA	Defense Information Systems Agency
DISN	Defense Information Systems Network
DMS	Defense Message System
DoD	Department of Defense
DOL	Department of Labor
DP	distribution point
DSA	Directory Service Agent
DSTU	Draft Standard for Trial Use
DTS	Dedicated Transmission Service
DUA	Directory User Agent
DUNS®	Data Universal Numbering System
EA	Executive Agent
EBB	Electronic Bulletin Board
EBBS	Electronic Bulletin Board System
EC	electronic commerce
ECA-PMO	Electronic Commerce for Acquisition Program Management Office
ECAS	Electronic Commerce Acquisition System
ECAT	Electronic Commerce Acquisition Team
EDCARS	Engineering Data Computer Assisted Retrieval System (Air Force)
EDI	electronic data interchange
EDIFACT	EDI for Administration, Commerce, and Transport
EDL	Engineering Data List
EFT	electronic funds transfer
E-mail	electronic mail
FAPM	Functional Activity Program Manager
FAR	Federal Acquisition Regulation
FFRDC	Federally Funded Research and Development Center
FIM	Functional Integration Management
FIPS	Federal Information Processing Standard
FIRMPoC	Federal Information Resource Management Policy Council
FIRMR	Federal Information Resources Management Regulation
FIRP	Federal Internetworking Requirements Panel
FMS	Financial Management Service
FRB	Federal Reserve Bank
FSC	Federal Supply Class
FTAM	file transfer, access, and management
FTP	file transfer protocol
FTS2000	Federal Telecommunications System 2000
GAO	General Accounting Office
GEIS	General Electric Information Services
GII	Government Information Infrastructure

GITS	Government Information Technology Services
GOSIP	Government Open Systems Interconnection Profile
GOTS	government off-the-shelf
GSA	General Services Administration
GUI	graphical user interface
GW	gateway
HPCC	High Performance Computing and Communications
HUB	Communications HUB
IC	implementation convention
IMPAC	International Merchant Purchase Authorization Card
IGOSS	Industry and Government Open Systems Specification
INFOPORT	information port
IP	Internet protocol
IPS	Internet protocol suite
IRDS	Information Resource Dictionary System
IRM	information resource management
IRS	Internal Revenue Service
ISDN	integrated services digital network
ISO	International Standards Organization (also known as International Organization for Standardization)
IT	information technology
JTC	Joint Technical Committee
LMI	Logistics Management Institute
MAC	message authentication code
MIME	Multipurpose Internet Mail Extensions
MIS	management information system
MLS	multilevel secure
MSP	message security protocol
MTA	Message Transfer Agent
MTBF	mean time between failures
NACHA	National Automated Clearing House Association
NASA	National Aeronautics and Space Administration
NEP	network entry point
NIC	Network Information Center
NII	National Information Infrastructure
NIST	National Institute of Standards and Technology
NIUF	North American ISDN User's Forum
NLSP	network layer security protocol
NPAA	National Oceanic and Atmospheric Administration
NPR	National Performance Review
NSF	National Science Foundation
NSN	national stock number
NTIA	National Telecommunications and Information Administration

O&M	operations and maintenance
OFPP	Office of Federal Procurement Policy
OO	object oriented
OS	operating system
OSF	Open Systems Foundation
OSI	open system interconnectivity
PAT	process action team
PEM	privacy enhanced mail
PM	program manager
PMC	President's Management Council
PO	purchase order
POC	point of contact
POSIX	portable operating system specification
PR	purchase request
PSS	Packet Switched Service
R&D	research and development
RDA	Remote Data Access
RDBMS	relational data base management system
RFI	request for information
RFP	request for proposal
RFQ	request for quotation
SA	system administrator
SB	small business
SBA	Small Business Administration
SC	Special Committee
SCSI	Standard Computer System Interconnect
SDB	Small Disadvantaged Business
SDIS	Switched Digital Integrated Service
SDS	Switched Data Service
SF	standard form
SIC	standard industrial classification
SMTP	simple mail transfer protocol
SNA	System Network Architecture
SNMP	simple network management protocol
SOW	statement of work
SQL	standard query language
SVS	Switched Voice Services
TAFIM	Technical Architecture Framework for Information Management
TBD	to be determined
TCP/IP	transmission control protocol/Internet protocol
TELNET	telecommunications network protocol
TIN	taxpayer identifying number
TLSP	transport layer security protocol
TP	Trading Partner(s)

TPA	trading partner agreement
TPIN	trading partner identification number
TR	telecommunications request
TRM	technical reference model
TSOW	technical scope of work
TSR	telecommunication service request
U.S.C.	U.S. Code
UA	user agent
UN	United Nations
UPS	uninterruptable power supply
USMTF	United States Message Text Formats
USPS	U.S. Postal Service
UUCP	UNIX to UNIX Copy Program
VA	Department of Veterans Affairs
VAN	value-added network
VAS	value-added services
VN	virtual network
VT	virtual terminal
VTs	Video Transmission Service
WAIS	wide area information server
WAN	wide area network
WG	working group
WWW	World Wide Web
X.400	OSI message handling system
X.500	OSI directory
X12	See ASC X12
XMODEM	transmission protocol
XPG	X/Open Portability Guide